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EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE		NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE		
SR	A1	5,658,763	08/97	Dora	ai et al	\	1	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
	A2	5,525,491	06/96	Hus	ton et al		1			
	А3	5,558,852	09/96	Bigr	er et al					
	A4	5,610,013	03/97	Van	den Eynde e tal		\			
	A5	5,622,852	04/97	Kors	meyer	435	325			
	A6 5,565,332 10/9		10/96	Hoo	genboom et al	530	387.1			
*	A7	4,946,778	09/90	Ladi	ner et al	435	69.6	\		
		OTHER DOCU	MENTS (Includ	ing A	uthor, Title, Date, Pertii	nent Pages,	Etc.)			
SR	A8	Brunelli & Pall, Yea	est, 1993, vol. 9, p	p. 30	9-1318, Abstract					
1	A9	Miller et al, FASEB	J., 9:190-199, 19	95			,	-		
	A10	Nature Biotechnology, 15:815, 1997								
		Orkin et al., Report & Recommendation of the Panel to Assess the NH Investment in Research on Gene								
	A10 Nature Biotechnology, 15:815, 1997 Orkin et al., Report & Recommendation of the Panel to Assess the NH Investment in Research on General Therapy, 1995 A12 Marshall, Science, 209:1050-1055, 1995									
	A12	Marshall, Science, 209:1050-1055, 1995								
	A13	Culver et al., TIG, 10:174-178, 1994								
	A14	Hensel et al., Stedman's Medical Dictionary, 25th Edition, p. 798, 1990, Williams & Wilkins,								
	U.S. PATENT DOCUMENTS CLASS SUB- FILING DATE NAME CLASS SUB- FILING DATE FAPPROPRIATE FAPPR									
	A15	Wenzl et al, Yeast,	8:667-668, 1992							
	A16	Reynes et al, Gene	Ther. Meet. Col	d Spri	ng Harbor, 1994, Abstrac	t 140				
	A17						·			
	A18					dies from pha	ge display re	pertoires to a		
	,					<u>.</u>	·			
	A19			teract	ion traps/ two-hybrid syst	ems to bioted	hnology rese	arch", Curr. Op.		
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4	A20									
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Form PTO-1		U.S. DEPARTMENT OF COMMERCE	ATTY. DOCKET NO.	SERIAL NO.					
(MODIFIED)		PATENT AND TRADEMARK OFFICE	039322-0226 APPLICANT	Unassigned					
INF	ORMAT	ION DISCLOSURE CITATION	James P. Hoeffler et al.						
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	(Use s	everal sheets if necessary)	08/28/2001	Unassigned					
		OTHER DOCUMENTS (Including A	Author, Title, Date, Pertinent Pages	, Etc.)					
		Phizicky et al., Protein-protein interactions; Methods for detection and analysis", Microbiological Reviews,							
SR	A21	59:94, (1995)							
		Allen et al., "Finding prospective partners	in the library; the two-hybrid system	and phage display find a match					
İ	A22	TIBS, 20:511 (1995)							
		Griffiths et al., "Isolation of high affinity hi	uman antibodies directly from large sy	nthetic repertoires", EMBO,					
	A23	13:3245, (1994)							
		De Kruif et al., "Selection and application of human single chain Fv antibody fragments", J. Mol. Biol.,							
	A24	248:97, (1995)							
	ļ	Yang et al., "Protein-peptide interactions analyzed with the yeast two-hybrid system", Nucl. Acids Res., 23:1152, (1995)							
	A25								
		Estojak et al., "Correlation of two-hybrid affinity data with in vitro measurements" Molecular and Cellular							
1	A26	Biology, 15:5820, (1995)							
		Somia et al., "Generation of targeted retro	oviral vectors by using single chain va	riable fragment: An approach					
	A27	To in vivo gene delivery", PNAS, 92:7570) (1995)						
	 	Ditzel et al., "Neutralizing recombinant human antibodies/isolated by using an epitope-masking procedure"							
	A28	J. Immunol., 154:893, (1995)							
		Biocca et al., "Single chain fragments targeted to the endoplasmic reticulum, cytosol and mitochndria" Biotechnology, 13:1110, (1995) Vaughan et al., Human antibodies with sub-nanomolar affinities/phage display library", Nature Biotechnology,							
	A29								
	 								
	A30	14:309, (1996)							
	A31	Neri et al., Engineering recombinant antil	bodies for immunotherapy", Cell Bioph	ysics, 27:47, (1995)					
	A32	Llewelyn et al., "Monoclonal antibodies in	medicine", BMJ, 305:1269, (1992)						
	A33	Hawkins et al., "Selection of phage antibo	odies by binding affinity", J. Mol. Biol.,	226:889, (1992)					
	A34	Hawkins et al., "Adapting antibodies for c	linical use", BMJ, 305:1348, (1992)						
	A35	Russell et al., Principles of antibody there	apy", BMJ, 305:1424, (1992)						
		Marks et al., "Oligonucleotide primers for	PCR amplification of human immunog	globulin variable genes and					
	A36	Design of family-specific oligonucleotide	probes", Eur. J. Immunol., 21:985, (19	91)					
		Marks et al., "By-passing immunization: h	numan antibodies from V-gene librarie	s displayed on phage", J. Mol.					
Y	A37	Biol., 222:581, (1991)							
EXAMINER		1	DATE CONSIDERED						
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EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include any copy of this form with next communication to applicant.

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Form P10-14	149	U.S. DEPARTMENT OF COMMERCE	ATTY, DOCKET NO.	SERIAL NO.						
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	(Use s	everal sheets if necessary)	08/28/2001	Unassigned						
		OTHER DOCUMENTS (Including A	uthor, Title, Date, Pertinent Pages,	Etc.)						
gn	A38	Werge et al., Intracellular Immunization, I	FEBS, 274:193, (1990)							
800										
	A39	Hoeffler et al., "Towards isolation of singl	e-chain variable domains with high-affi	nity antigen-binding						
	^33	Characteristics using the two-hybrid system in yeast", Meeting Abstract, (Tahoe, CA; February 1994)								
		J. Cell Biochem, 1994 Supp. 18D, 190								
	A40	Hollinger et al., *Engineering biospecific a	antibodies", Curr. Op. Biol., 4:446, (199	93)						
		Biocca et al., "Intracellular expression of single chain Fv fragments inhibits", Biochem. Biophys. Res. Comm.,								
V	A41	197:422, (1993)								
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Page 1 of 1 Form PTO-1449 U.S. DEPARTMENT OF COMMERCE ATTY, DOCKET NO. SERIAL NO. PATENT AND TRADEMARK OFFICE 039322-0226 (MODIFIED) 09/939,769 APPLICANT INFORMATION DISCLOSURE CITATION James P. HOEFFLER et al. **GROUP ART UNIT FILING DATE** (Use several speets neces 08/28/2001 Unassigned **U.S. PATENT DOCUMENTS FILING DATE EXAMINER** SUB-**CLASS** NAME **REF** INITIAL **CLASS APPROPRIATE FOREIGN PATENT DOCUMENTS** TRANSLATION **DOCUMENT** SUB-DATE COUNTRY CLASS REF NUMBER CLASS YES NO WO96 30512 A 10/96 **WIPO** SR **A1** WO 96 02561 A 02/96 **WIPO A2** 0 557 897 A 09/00 **EUROPE A3** WO 00 54057 A 09/00 **WIPO** A4 WO 01 48017 A 07/01 **WIPO A5** OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) GARGANO, N., ET Al., "From Phase Libraries To Intracellular Immunization" Intracellular Antibodies: 52 Development and applications, Springer Verlag, Berlin, DE (1997), pp. 173-186, XP000916894 **B1** MARASCO, W.A., "Intracellular antibodies (intrabodies) as research reagents and therapeutic molecules for gene therapy" IMMUNOTECHNOLOGY, ELSEVIER SCIENCE PUBLISHERS BV, NL, Vol. 1, No. 1, (May 1995) pp 1-19, XP004052680 B2 MARASCO, W., "Intrabodies: turning the humoral immune system outside in for intracellular immunization" GENE THERAPY, MACMILLAN PRESS LT., BASINGSTOKE, GB, Vol. 4, no. 1, (Jan. 1997), pp. 11-15, **B3** XP002097642 MHASHILKAR, A. M., ET AL.:, "Inhibition of HIV-1 Tat-mediated LTR transactivation and HIV-1 infection by anti-Tat single chain intrabodies", EMBO JOURNAL, OXFORD UNIVERSITY PRESS, SURREY, GB, Vol. 14. **B4** No. 7, 1995, pp. 1542-1551, XP002089075 HAARD, DE H J W, ET AL., "SELECTION OF RECOMBINANT, LIBRARY-DERIVED ANTIBODY FRAGMENTS AGAINST P24 FOR HUMAN IMMUNODEFICIENCY VIRUS TYPE 1 DIAGNOSTICS" CLINICAL AND DIAGNOSTIC LABORATORY IMMUNOLOGY, AMERICAN SOCIETY FOR MICROBIOLOGY, US, Vol., **B5** No. 5, Sept. 1998, pp. 636-644, XP000939091 **EXAMINER** DATE CONSIDERED 10/15/04 EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include any copy of this form with next

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	INFORMAT	TON DISC	LOSURE	Application Number	09/939,769			
	STATEME	NT BY API	PLICANT	Filing Date	08/28/2001			
	Date Subm	ittad: luaa	25 2002	First Named Inventor	James P. Hoeffler			
	Date Subin	imen. Julië	23, 2002	Group Art Unit	1642			
	(use as many	sheets as	necessary)	Examiner Name	Susan Unger			
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	U.S. PATENT DOCUMENTS									
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		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
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SN	A6	Gargano, N. et al., "From Phage Libraries to Intracellular Immunization," pp. 173-186 (1997) DUPLICATE			
	Ą7	Marasco, W. A., "Intracellular Antibodies (intrabodies) as research reagents and therepeutio molecules for gene therapy," Immunotechnology, vol. 1, no. 1., pp. 1-19 (1995) **DUPLICATE**			
-	A8	Marasco, W.A., "Intrebodies: tuming the humoral immune system outside in for intracellular immunization," Gene Therapy, vol. 4, no. 1, pp. 11-15 (1897) PUPLICATE			

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10/15/04

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS					
Examiner Cita No.		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number publisher, city and/or country where published.					
SR	A9	Mhashilkar A. M. et al., "Inhibition of HIV-1 Tat-mediated LTR transactivation and HIV-1 infection by unti-Tat" single chain intrabodies," The EMBO Journal, vol. 14, no. 7, pp. 1542-1551 (1995) DIPLICATE					
	A10	Haard, De H. J. W. et al., "Selection of Recombinant, Library-Berived Antibody Fragmente egainst p24 for Human Immunodaficiency Virus Type 1 diagnostics," Clin. Diagn. Lab. Immunol., vol. 5, no. 5, pp. 638-644 (1998)	-				
	A11	Visintin M. et al., "Selection of antibodies for intracellular function using a two-hybrid in vivo system," PNAS, vol. 96, no. 21, pp. 11723-11728 (1999)					
	A12	De Jaeger Geert et al., "Analysis of the interaction between single-chain variable fragments and their antigen in a reducing intracellular environment using the two-hybrid system," FEBS Letter, vol. 487, no. 2-3, pp. 316-320 (2000)					
4	A13						
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